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| 10/761,919      | 01/20/2004  | Julie A. Kadashevich | 303606.3003-100     | 4101             |

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LOTUS AND RATIONAL SOFTWARE  
STEUBING MCGUINNESS  
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ACTON, MA 01720

EXAMINER

URICK, MATTHEW T

ART UNIT PAPER NUMBER

2113

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/761,919 | <b>Applicant(s)</b><br>KADASHEVICH, JULIE A. |  |
|                              | <b>Examiner</b><br>Matt Urick        | <b>Art Unit</b><br>2113                      |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 1/20/04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Non-Final Official Action***

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 21 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 21 recites 'a computer program product having machine-readable instructions...'. Thus, these claims merely recite a program per se, which is not permissible under the Examination Guidelines for Computers - Related Inventions. The examiner suggests the following as a way to correct those claims: "a computer program product having machine-readable instructions stored on a computer readable storage medium..." Claims 22-24 are also rejected because they are dependent on claim 21.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 1-3, 6, 21, 22, and 24 are rejected under 35 U.S.C. 102(e) as being anticipated by McDermott (United States Patent No. 6,584,587 B1).

As per claim 1, McDermott discloses:

A method for identifying a runaway software agent operating in a computer system, said method comprising:

defining a time window for said agent (column 5 lines 10-15);

receiving a current time signal (column 5 lines 10-13);

determining a start time for said agent, said start time denoting when said agent began operating in said system (column 5 lines 10-15);

determining if said time window is exceeded using said start time and said current time (column 5 lines 49-56); and

identifying said agent if said time window is exceeded, said identifying includes identifying said agent as a runaway agent (column 5 lines 49-56).

As per claim 2, McDermott discloses:

The method of claim 1, wherein said time window includes an operating time limit for said agent (column 5 lines 10-15).

As per claim 3, McDermott discloses:

The method of claim 1, wherein said time window includes a starting event associated with said agent (column 5 lines 10-15: the status is set to "called").

As per claim 6, McDermott discloses:

The method of claim 1, further comprising: terminating said agent if said agent is identified (column 6 lines 7-15: the affected system receives a hardware reset; column 1 lines 26-30: a hardware reset may be performed only to the timed-out subsystem).

As per claim 21, McDermott discloses:

A computer program product having machine-readable instructions provided thereon for instructing a processor to perform a method for identifying a software agent operating in a computer system, said computer program product comprising:

instructions for defining a time window associated with said agent; instructions for receiving a current time signal (column 5 lines 10-15);

instructions for determining a start time for said agent (column 5 lines 10-15);

determining if said time window has been exceeded using said start time and said current time (column 5 lines 49-56); and

instructions for flagging said agent as a runaway agent if said time window is exceeded (column 5 lines 49-56).

As per claim 22, McDermott discloses:

The method of claim 21, wherein said time window includes an operating time limit for said agent (column 5 lines 10-15).

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As per claim 24, McDermott discloses:

The method of claim 21, further comprising: terminating said agent if said agent is identified (column 6 lines 7-15: the affected system receives a hardware reset; column 1 lines 26-30: a hardware reset may be performed only to the timed-out subsystem).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over McDermott (United States Patent No. 6,584,587 B1) in view of Adkisson (United States Patent Application Publication 2004/0237005 A1).

McDermott fails to disclose:

The method of claim 1, further comprising:  
determining if another agent relies on said agent if said agent is a runaway agent; and  
notifying said another agent relying on said runaway agent.

Adkisson discloses an alert method where system processes are prevented from issuing new requests to a failed system (§ 7). The system may do this by detecting if a set of instructions are associated with a failed resource, and if so, draining the instructions (§ 15). Adkisson discloses that the purpose of his invention is to prevent the widespread failure of a multiprocessor system due to the failure of one component (§ 5). McDermott also discloses that he wishes to prevent system-wide lockup due to the failures of one or more subsystems, (column 1 lines 11-21) and that his system can be adapted to other types of systems requiring such protection (column 6 lines 22-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the error recovery system of Adkisson into the watchdog system of McDermott, preventing one subsystem from causing a system-wide crash.

Claims 5, 7, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDermott (United States Patent No. 6,584,587 B1) in view of Burgess (United States Patent 5,796,633).

As per claim 5, McDermott fails to disclose:

The method of claim 1, further comprising: providing information about said agent to a user interface.

Burgess discloses a system in which an alert thread monitors the performance information of a monitored computer (column 6 line 57 – column 7 line 4). The data may

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be stored as an SQL file for presentation using database software (column 12 lines 8-17). Burgess discloses that his invention enables an administrator to retain large amounts of information and analyze the data for important trends and performance issues (column 2 lines 35-63). McDermott discloses that his system stores a table of alerts (column 4 lines 48-62), and that they may be analyzed later for diagnostic/debugging purposes (column 5 lines 57-60). Using Burgess' system would enable the user to diagnose or debug a large database of errors, as well as filter more important events for consideration. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the performance monitoring system of Burgess into the watchdog system of McDermott, as a means for debugging and fault diagnosis.

As per claim 7, McDermott fails to disclose:

The method of claim 5, further comprising: allowing a user to specify a ranking for said agent.

Burgess discloses a system in which an alert thread monitors the performance information of a monitored computer (column 6 line 57 – column 7 line 4). The data may be stored with user defined alert levels (column 7 lines 4-8). The data may then be stored as an SQL file for presentation using database software (column 12 lines 8-17). Burgess discloses that his invention enables an administrator to retain large amounts of information and analyze the data for important trends and performance issues (column 2 lines 35-63). McDermott discloses that his system stores a table of alerts (column 4



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lines 48-62), and that they may be analyzed later for diagnostic/debugging purposes (column 5 lines 57-60). Using Burgess' system would enable the user to diagnose or debug a large database of errors, as well as filter more important events with higher alert levels for consideration. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the performance monitoring system of Burgess into the watchdog system of McDermott, as a means for debugging and fault diagnosis.

As per claim 23, McDermott fails to disclose:

The method of claim 21, further comprising: providing information about said agent to a user interface.

Burgess discloses a system in which an alert thread monitors the performance information of a monitored computer (column 6 line 57 – column 7 line 4). The data may be stored as an SQL file for presentation using database software (column 12 lines 8-17). Burgess discloses that his invention enables an administrator to retain large amounts of information and analyze the data for important trends and performance issues (column 2 lines 35-63). McDermott discloses that his system stores a table of alerts (column 4 lines 48-62), and that they may be analyzed later for diagnostic/debugging purposes (column 5 lines 57-60). Using Burgess' system would enable the user to diagnose or debug a large database of errors, as well as filter more important events for consideration. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the performance monitoring

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system of Burgess into the watchdog system of McDermott, as a means for debugging and fault diagnosis.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDermott (United States Patent No. 6,584,587 B1) in view of Microsoft Computer Dictionary (fifth edition)

As per claim 8, McDermott discloses:

A method for identifying a runaway software agent [operating in an HTTP environment] on a computer system coupled to a communications network, said method comprising:

identifying a thread [associated with said HTTP environment] using a thread identifier (column 4 line 63 – column 5 line 2: watchdog module selected to be executed);

initiating an agent from said thread (column 5 lines 3-5: watchdog module initiated);

defining a time window associated with said agent (column 5 lines 10-15);

obtaining a start time for said agent on said thread (column 5 lines 10-15);

receiving a current time signal (column 5 lines 10-15, column 5 lines 49-56); and

determining if said time window is exceeded using said start time and said current time signal (column 5 lines 49-56).

McDermott does not disclose:

identifying a thread associated with said HTTP environment...

Microsoft Computer Dictionary discloses HTTP as a universally used internet protocol. McDermott discloses that the method of his invention may be implemented by sending code including the method over a network (column 6 lines 50-65). HTTP could be used to send the data over the network, since it is a widely used internet protocol. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate an HTTP environment into the watchdog system of McDermott, as a means to implement the invention over a network.

As per claim 9, McDermott discloses:

The method of claim 8, further comprising: identifying said agent as a runaway agent if said time window is exceeded (column 5 lines 49-56).

Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDermott (United States Patent No. 6,584,587 B1) in view of Microsoft Computer Dictionary (fifth edition), as applied above, and in view of Burgess (United States Patent 5,796,633).

As per claim 10, McDermott and Microsoft Computer Dictionary fail to disclose:

The method of claim 9, further comprising: providing said runaway agent to a display device.

Burgess discloses a system in which an alert thread monitors the performance information of a monitored computer (column 6 line 57 – column 7 line 4). The data may

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be stored as an SQL file for presentation using database software (column 12 lines 8-17). Burgess discloses that his invention enables an administrator to retain large amounts of information and analyze the data for important trends and performance issues (column 2 lines 35-63). McDermott discloses that his system stores a table of alerts (column 4 lines 48-62), and that they may be analyzed later for diagnostic/debugging purposes (column 5 lines 57-60). Using Burgess' system would enable the user to diagnose or debug a large database of errors, as well as filter more important events for consideration. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the performance monitoring system of Burgess into the watchdog system of McDermott, as a means for debugging and fault diagnosis.

As per claim 11, McDermott and Microsoft Computer Dictionary fail to disclose:

The method of claim 9, further comprising: ranking said agent against a plurality of other runaway agents associated with said computer system.

Burgess discloses a system in which an alert thread monitors the performance information of a monitored computer (column 6 line 57 – column 7 line 4). The data may be stored with user defined alert levels (column 7 lines 4-8). The data may then be stored as an SQL file for presentation using database software (column 12 lines 8-17). Burgess discloses that his invention enables an administrator to retain large amounts of information and analyze the data for important trends and performance issues (column 2 lines 35-63). McDermott discloses that his system stores a table of alerts (column 4

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lines 48-62), and that they may be analyzed later for diagnostic/debugging purposes (column 5 lines 57-60). Using Burgess' system would enable the user to diagnose or debug a large database of errors, as well as filter more important events with higher alert levels for consideration. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the performance monitoring system of Burgess into the watchdog system of McDermott, as a means for debugging and fault diagnosis.

As per claim 12, McDermott discloses:

The method of claim 10, further comprising: performing a corrective action on said runaway agent (column 6 lines 7-15: the affected system receives a hardware reset; column 1 lines 26-30: a hardware reset may be performed only to the timed-out subsystem).

As per claim 13, McDermott and Microsoft Computer Dictionary fail to disclose:

The method of claim 12, wherein said corrective action is performed by a user.

Burgess discloses that his system gathers performance data, and notifies an administrator when a situation becomes alertable (column 2 lines 45-53). The administrator can use the alerts to take immediate manual action if necessary. Burgess discloses that is known in the art to have system administrators adjust or upgrade a network based on gathered performance data (column 1 lines 46-57). McDermott discloses that he wishes to store a table of alerts for later diagnosis and debugging

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(column 4 lines 48-62; column 5 lines 57-60). A system administrator, as disclosed by Burgess, would be able to use the data stored by McDermott's system for debugging or diagnosis if necessary, especially in cases where a reset does not remedy the problem. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate administrator intervention, as disclosed by Burgess, into the watchdog system of McDermott, as a means for diagnosis and debugging.

As per claim 14, McDermott discloses:

The method of claim 12, wherein said corrective action is performed by said system (column 6 lines 7-15: the affected system receives a hardware reset; column 1 lines 26-30: a hardware reset may be performed only to the timed-out subsystem).

As per claim 15, McDermott and Microsoft Computer Dictionary fail to disclose:

The method of claim 9, further comprising: specifying a set of ranking criteria for said runaway agent using a user interface.

Burgess discloses a system in which an alert thread monitors the performance information of a monitored computer (column 6 line 57 – column 7 line 4). The data may be stored with user defined alert levels (column 7 lines 4-8). The data may then be stored as an SQL file for presentation using database software (column 12 lines 8-17). Burgess discloses that his invention enables an administrator to retain large amounts of information and analyze the data for important trends and performance issues (column

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2 lines 35-63). McDermott discloses that his system stores a table of alerts (column 4 lines 48-62), and that they may be analyzed later for diagnostic/debugging purposes (column 5 lines 57-60). Using Burgess' system would enable the user to diagnose or debug a large database of errors, as well as filter more important events with higher alert levels for consideration. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the performance monitoring system of Burgess into the watchdog system of McDermott, as a means for debugging and fault diagnosis.

As per claim 16, McDermott and Microsoft Computer Dictionary fail to disclose:

The method of claim 15, wherein said ranking further comprises fatal, failure, high warning and low warning.

Burgess discloses a system in which an alert thread monitors the performance information of a monitored computer (column 6 line 57 – column 7 line 4). The data may be stored with user defined alert levels (column 7 lines 4-8). The data may then be stored as an SQL file for presentation using database software (column 12 lines 8-17). Burgess discloses that his invention enables an administrator to retain large amounts of information and analyze the data for important trends and performance issues (column 2 lines 35-63). McDermott discloses that his system stores a table of alerts (column 4 lines 48-62), and that they may be analyzed later for diagnostic/debugging purposes (column 5 lines 57-60). Using Burgess' system would enable the user to diagnose or debug a large database of errors, as well as filter more important events with higher

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alert levels for consideration. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the performance monitoring system of Burgess into the watchdog system of McDermott, as a means for debugging and fault diagnosis.

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDermott (United States Patent No. 6,584,587 B1) in view of Beavers (United States Patent Application Publication 2003/0221123 A1).

As per claim 17, McDermott discloses:

A method for managing a plurality of software agents operating in a computer system, said method comprising the steps of:

defining a time window for said plurality of agents (column 5 lines 10-15);

identifying at least one of said plurality of agents exceeding said time window to produce an identified set (column 5 lines 49-56);

McDermott does not disclose:

filtering said identified set according to predetermined filtering parameters;

ordering said agents within said identified set; and

displaying said identified set, thereby managing the plurality of software agents operating in the computer system.

Beavers discloses a system in which a series of alerts are filtered according to whether or not they represent a particular pattern (§ 36 and figure 3). These incidents may be sorted and displayed according to threat level or the time they occurred (§ 42).



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Beavers discloses that this system enables an administrator to manage a large list of faults in order to take action (§ 43). McDermott discloses that his system stores a table of alerts (column 4 lines 48-62), and that they may be analyzed later for diagnostic/debugging purposes (column 5 lines 57-60). Using Beavers' system would enable the user to diagnose or debug a large database of errors, as well as filter more important events with higher alert levels for immediate consideration. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the alert filtering system of Beavers into the watchdog system of McDermott, as a means for debugging and fault diagnosis.

As per claim 18, McDermott fails to disclose:

The method of claim 17, wherein said ordering step produces a rank ordered list of said agents in said identified set.

Beavers discloses a system in which a series of alerts are filtered according to whether or not they represent a particular pattern (§ 36 and figure 3). These incidents may be sorted and displayed according to threat level or the time they occurred (§ 42). Beavers discloses that this system enables an administrator to manage a large list of faults in order to take action (§ 43). McDermott discloses that his system stores a table of alerts (column 4 lines 48-62), and that they may be analyzed later for diagnostic/debugging purposes (column 5 lines 57-60). Using Beavers' system would enable the user to diagnose or debug a large database of errors, as well as filter more

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important events with higher alert levels for immediate consideration. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the alert filtering system of Beavers into the watchdog system of McDermott, as a means for debugging and fault diagnosis.

As per claim 19, McDermott fails to disclose:

The method of claim 17, wherein said filtering parameters are defined by a user.

Beavers discloses a system in which a series of alerts are filtered according to whether or not they represent a particular pattern (§ 36 and figure 3). The series of alerts may be defined by a user (§ 46 - § 47). These incidents may be sorted and displayed according to threat level or the time they occurred (§ 42). Beavers discloses that this system enables an administrator to manage a large list of faults in order to take action (§ 43). McDermott discloses that his system stores a table of alerts (column 4 lines 48-62), and that they may be analyzed later for diagnostic/debugging purposes (column 5 lines 57-60). Using Beavers' system would enable the user to diagnose or debug a large database of errors, as well as filter more important events with higher alert levels for immediate consideration. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the alert filtering system of Beavers into the watchdog system of McDermott, as a means for debugging and fault diagnosis.

As per claim 20, McDermott fails to disclose:

The method of claim 17, further comprising: identifying members of said identified set having a thread associated therewith to produce a thread set.

Beavers discloses a system in which a series of alerts are filtered according to whether or not they represent a particular pattern (§ 36 and figure 3). The combinations of alerts may be stored according to what processes the error is related to (§ 45). These incidents may be sorted and displayed according to threat level or the time they occurred (§ 42). Beavers discloses that this system enables an administrator to manage a large list of faults in order to take action (§ 43). McDermott discloses that his system stores a table of alerts (column 4 lines 48-62), and that they may be analyzed later for diagnostic/debugging purposes (column 5 lines 57-60). Using Beavers' system would enable the user to diagnose or debug a large database of errors, as well as filter more important events with higher alert levels for immediate consideration. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to incorporate the alert filtering system of Beavers into the watchdog system of McDermott, as a means for debugging and fault diagnosis.

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matt Urick whose telephone number is (571) 272-0805. The examiner can normally be reached on 8:00 - 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MTL  
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